

The *Spark Portable* Monochrome Adapter



SPARK PT

Introducing the Spark PT monochrome video board for the Apple Macintosh Portable. The Spark PT offers the latest in high density custom gate array technology which results in a very compact video board with low power consumption and high reliability. The Spark PT can drive the Apple 12" monochrome monitor, the Apple 15" monochrome portrait display, or the Apple 21" monochrome landscape monitor. The Spark PT can also drive many other monochrome monitors from 15" to 21"; all at a high vertical refresh rate to eliminate flicker and therefore to reduce strain on your eyes.

No matter which monitor is used, the Spark PT offers a What You See Is What You Get ('WYSIWYG') resolution-72dpi. Through its Smart Port monitor detector, the Spark PT determines the monitor type being used and automatically configures itself accordingly. It even comes with special Dual Screen Init Software which allows the use of the Portable's LCD screen in addition to the large screen; this results in more usable desktop space. The Spark PT is the first monochrome video board for the Apple Macintosh Portable to support a wide variety of display sizes with autosensing capability.

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The *Spark Portable* Monochrome Adapter

Features & Benefits

Feature	Benefit
• Smart Port Monitor Detector	Determines what type of monitor is attached and automatically configures itself accordingly.
• 75 Hz Vertical Refresh Rate	Produces a rock solid display which reduces eye strain.
• Multiple monitor compatibility	Allows the use of the Apple 12", 15", or 21" monochrome displays along with a host of other displays.
• Dual Screen Init Software	Allows the combined use of the large screen and the Portable's LCD screen for extra desktop space.
• Advanced Gate Array Design	Very low power consumption conserves battery life and increases reliability.

System Requirements

Computer	Macintosh Portable
Monitor	Apple 12", 15", or 21" monochrome monitors; Other various 15"-21" monochrome monitors
Cabling	Cabling included
Software	Apple System 6.0.3 or later; Dual Screen software included

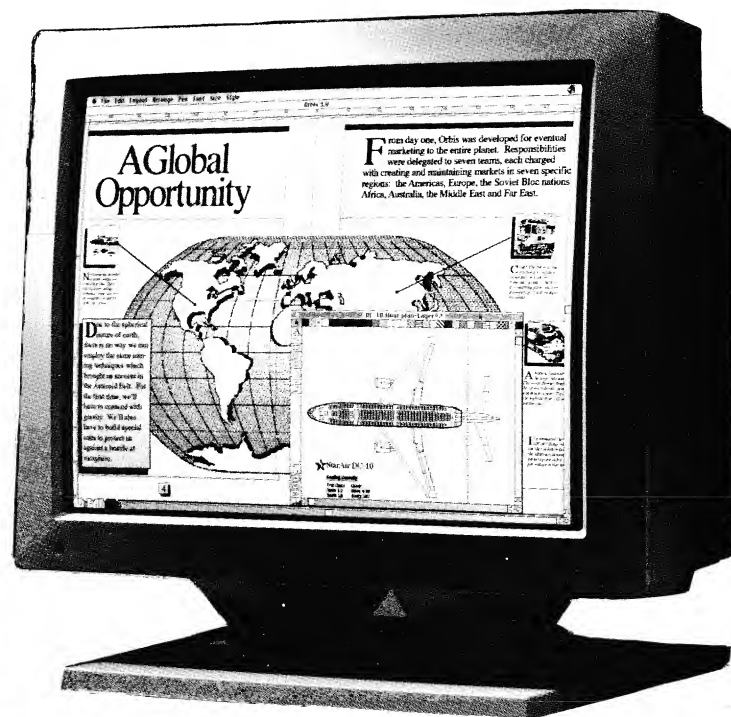
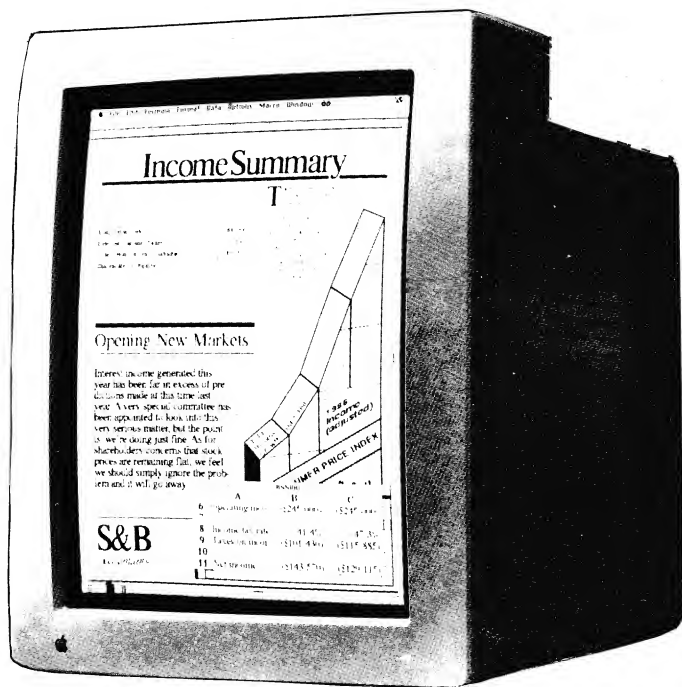
Technical Specifications

Resolution	Apple 21": 1152x870 Apple 15": 640x870 Apple 12": 640x480
Bandwidth	100MHz Max.
Horizontal	69kHz
Vertical	75Hz
Bits/Pixel	1
Memory	128KB
Output	DB-15

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The SPARK Monochrome Adapters



SPARK SE

*Also operates on Plus, Classic, and LC

Introducing the Spark SE monochrome video board for the Apple Macintosh SE. The Spark SE sets a new standard in monochrome graphics by offering a 72 dpi WYSIWYG resolution, 78 Hz vertical refresh rate, dual screen operation, large screen enhancement software, and compatibility with the Apple 15" portrait or 21" landscape monitors as well as the Ikegami DM2010 and the Sampo OfficePro II monitors. The Spark SE is the first monochrome video board compatible with both Apple monitors on the Macintosh SE.

SPARK II

Introducing the Spark II monochrome video board for the Apple Macintosh II, IIx, IIcx, IICI. The Spark II is a high performance video board with features such as a 72dpi WYSIWYG resolution, 78Hz vertical refresh rate, large screen enhancement software, and compatibility with the Apple 15" portrait or 21" landscape monitors as well as the Ikegami DM2010 and the Sampo Office-Pro II monitors. The Spark II is the board that will deliver a rock solid picture for comfortable extended use and is compatible with the Apple monochrome monitors.

SPARK 30

*Same board works in Mac IIsi without an adapter.

Introducing the Spark 30 monochrome video board for the Apple Macintosh SE/30. The Spark 30 sets a new standard in monochrome graphics by offering a 72dpi WYSIWYG resolution, 78Hz vertical refresh rate, large screen enhancement software, and compatibility with the Apple 15" portrait or 21" landscape monitors as well as the Ikegami DM2010 and the Sampo Office-Pro II monitors. The Spark 30 is the fastest monochrome interface for the Macintosh SE/30 that drives both of the Apple Monochrome displays.

Features & Benefits

Feature

Benefit

- 72 dpi pixel density
Provides a high resolution for a crisp, clear WYSIWYG display; ideal for desktop publishing spreadsheet applications.
- 78Hz vertical refresh rate
Produces a rock solid display which reduces eye strain.
- Multiple monitor compatibility
Allows the user to choose between the Apple 15" or 21" displays as well as the Sampo 19" OfficePro II and the Ikegami DM2010.
- Special Large Screen Enhancement Software
Offers pop-up menus, large cursor, screen saver, screen copy and large menu bar.

System Requirements

(Specifications are the same for Classic, Plus & LC. The LC does not require init like the Classic and Plus.)

	Spark SE	Spark II	Spark 30
Computer	Macintosh SE (Classic, Plus & LC)	Macintosh II, IIx, IICx, IICi	Macintosh SE/30 (IIsi & IIfx)
Monitor	Apple 15" or 21", Sampo OfficePro II and Ikegami DM2010.	Apple 15" or 21", Sampo OfficePro II and Ikegami DM2010.	Apple 15" or 21", Sampo OfficePro II and Ikegami DM2010.
Cabling	Cables included with monitors; special adapter needed for Apple monitors.	Cables included with monitors; special adapter needed for Apple monitors.	Cables included with monitors; special adapter needed for Apple monitors.
Software	Requires init software (included); includes special large screen enhancement software.	Includes special large screen enhancement software.	Includes special large screen enhancement software.

Technical Specifications

	Spark SE	Spark II	Spark 30
Resolution	1152x870: Apple 21" 600x800: Apple 15" 1024x768: Sampo 19"	1152x870: Apple 21" 600x800: Apple 15" 1024x768: Sampo 19"	1152x870: Apple 21" 600x800: Apple 15" 1024x768: Sampo 19"
Bandwidth	100MHz Max.	100MHz Max.	100MHz Max.
Vertical	64kHz	64kHz	64kHz
Horizontal	78Hz	78Hz	78Hz
Bits/Pixel	1	1	1
Memory	128KB	128KB	128KB
Output	DB-9	DB-9	DB-9

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